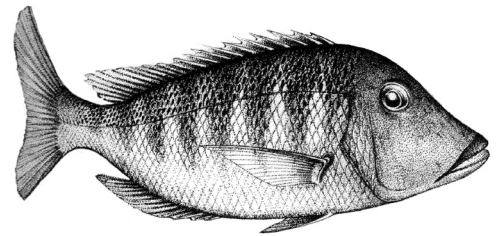


CATCH SHARES IN ACTION

Samoan Safata District Customary User Rights Program



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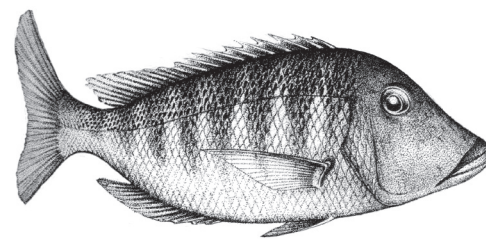
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UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE

CATCH SHARES IN ACTION

Samoan Safata District Customary User Rights Program



SPECIAL DESIGN FEATURES



MULTI-SPECIES, GROUP-ALLOCATED,
AREA-BASED, NON-TRANSFERABLE

The Samoan Customary User Rights System is an area-based catch share program that formalizes the customary fishing rights of native communities. Authorized by legislative reforms, fishing communities voluntarily establish and manage Territorial Use Rights for Fishing (TURFs) in traditional fishing areas. The program has been designed to meet the goals of sustainable resource use and empowering villages in fishery management. Key design features include the active participation of the Samoan government in guiding the creation and management of TURFs and the integration of traditional management practices to achieve sustainability. In Safata District, community members have established a district-wide TURF with a network of no-take reserves to increase biological performance and sustain local livelihoods into the future.

In the late 1980s and early 1990s, the Samoan government embarked on major efforts to formalize and support customary fishing rights. Through legislative reforms, groups of fishermen organized by villages are able to hold management authority over traditional fishing grounds, and establish laws regulating the harvests of community members and outsiders fishing in their waters. Through the bylaw formation process, many communities have established effective TURFs in which they manage their fishing grounds, including regulating access by community members and outsiders to ensure fishery sustainability.

Safata District is a settlement of nine villages located along the remote southern coast of Upolu, the second largest island in Samoa. Safata has formalized customary fishing rights and has established a district-wide TURF extending over traditional fishing grounds. With the assistance of the Samoan government, Safata has developed comprehensive management plans and has established 10 village-level, no-take reserves within its TURF area. The Safata District Committee, comprised of leaders from each of the nine villages, oversees marine resource management within the TURF (CRISP, 2008). Safata's population of 5,100 residents (Samoa Bureau of Statistics, 2012) is highly dependent on fisheries as a source of food and income. Approximately 88% of households engage in fishing activities and the community derives about 77% of its entire food source from adjacent lagoons and reefs (Zann, 1991). Residents target a variety of finfish and invertebrate species using methods including spear fishing, hook and line, netting and gleaning (Zann, 1991).

SYNOPSIS

Road to a Catch Share

For centuries, resource use in the coastal lagoons and reefs of Samoa was governed by customary management. The ability for village chiefs to hold secure and exclusive tenure (known as “matai” in Samoa) over a defined fishing area contributed to sustainable management of traditional fishing grounds. As in many Pacific Island nations, a period of colonization in Samoa beginning in the 1800s transferred ownership of the sea away from village chiefs and to the public domain (Techera, 2009). The adoption of Western legal systems constrained the ability for native communities to exercise their forms of customary management (Johannes, 2002; Techera, 2006; Govan et al., 2009).

In the mid-1980s, Samoa’s inshore fisheries were threatened by overexploitation, destructive fishing practices and environmental disturbance from land development (Fa’asili and Kelekolio, 1999; Techera, 2006). The degradation of important habitats, especially mangrove areas and beaches mined for sand, posed a threat to ecosystem health (King et al., 2001; Techera, 2006). National fishing regulations, which focused mainly on banning destructive fishing practices, were unsuccessful in addressing management challenges (Mackay, 2001). Although many communities attempted to manage their local resources using customary approaches, efforts were often subverted by the activities of outsiders who were not subject to community-based regulations (Techera, 2009).

In the late 1980s, the Samoan government recognized that villages were well positioned to manage inshore resources and embarked on a major effort to strengthen community-based management (Govan, 2011). The process began with a series of legislative reforms to enable community-based management under the modern legal framework. The Fisheries Act of 1988 created the opportunity for village leaders to work with the Samoan Fisheries Division to formalize local laws through a bylaw process (Johannes, 2002). The Village Fono Act of 1990 transferred management authority over traditional fishing areas back to the fono, or local council of chiefs (Fa’asili and Kelokolo, 1999). However, their jurisdiction was limited to internal community members (Troniak, 2008). An amendment to the Fisheries Act of 1988 allowed the fono to apply village bylaws to all persons, expanding legal jurisdiction to cover outsiders fishing in community-managed waters (Troniak, 2008).

To complement these legal changes, the Fisheries Division established a Fisheries Extension Program in 1995, which provides guidance and technical support to individual villages developing village-based management plans (Mackay, 2001; Tauaefa, 2007). By 1999, 62 villages had developed fisheries management plans, and 57 had implemented small no-take reserves within their fishing grounds (Kallie et al., 1999). Building off the successful extension program, in 2000 the Samoan government worked with international non-governmental organizations to develop integrated fishery management areas, synergizing efforts between individual villages at the district level. To ensure a sustainable fishery, leaders of Safata District implemented an effective TURF by creating bylaws managing the fishing access of community members and outsiders. Within its TURF boundaries, Safata’s leaders have established a network of no-take reserves to improve biological performance. The community-managed TURF of Safata is known locally as the Safata Marine Protected Area (MPA).

Performance

Where implemented, Samoan TURF programs have improved local management of marine resources and had positive impacts on both communities and the environment. The Safata District TURF serves as one example and is one of the largest and most successful in Samoa. After development and implementation of the district-wide TURF in 2000, food fish and other species increased in abundance (J. Ward, personal communication, 2013). There has been very strong community support and buy-in (Ministry of Natural Resources and the Environment, 2005) and high compliance with local regulations (J. Ward, personal communication, 2013). Community members report that their catches are increasing and they are spending less time fishing (Govan et al., 2009). Meanwhile, additional income from tourists visiting the TURF site has benefitted community members (Govan et al., 2009).

The current legal framework and government support provide an opportunity for any community to improve management, including the implementation of catch shares (i.e., TURFs) to strengthen local management in support of sustainability. By 2007, more than 80 villages had prepared management plans through the Fisheries Extension Program, 62 of which have developed no-take reserves within community managed areas (Govan, 2011). Many of these communities have elected to create bylaws that manage access and include the key attributes of a catch share program. By promoting community responsibility for the health of marine resources, the Fisheries Extension Program has gained international recognition (Tauaefa, 2007). It serves as model for the Pacific Islands region and has been adapted and implemented in neighboring American Samoa (MacKay, 2001; Sauaefa-Ainu'u, 2002).

STEP 1 IN ACTION

Define Program Goals

The overarching goals of the Fisheries Act and Village Fono Act, respectively, were to:

- Specify the “conservation, management and development of Samoan fisheries”
- “Validate and empower the exercise of power and authority by Village Fono in accordance with custom and usage of their villages”

Through an extensive consultation process, the Samoan government worked with the community of Safata to define social, economic and biological goals, including:

- Protection and sustainable use of threatened coastal marine biodiversity
- Empowerment of local communities to protect and manage coastal marine biological diversity effectively and to help them achieve sustainable use of marine resources

Additional goals outlined within Safata's fishery management plan include:

- Improvement of monitoring and enforcement of local regulations
- Education efforts to increase compliance and create a culture of conservation
- Protection of mangroves to maintain ecological health and increase tourism value

Food security was another big issue identified by Safata's leaders. To diversify long-term risk and ease short-term pressure, leaders identified the development of aquaculture and tourism activities as additional management goals (CRISP, 2008).

STEP 2 IN ACTION

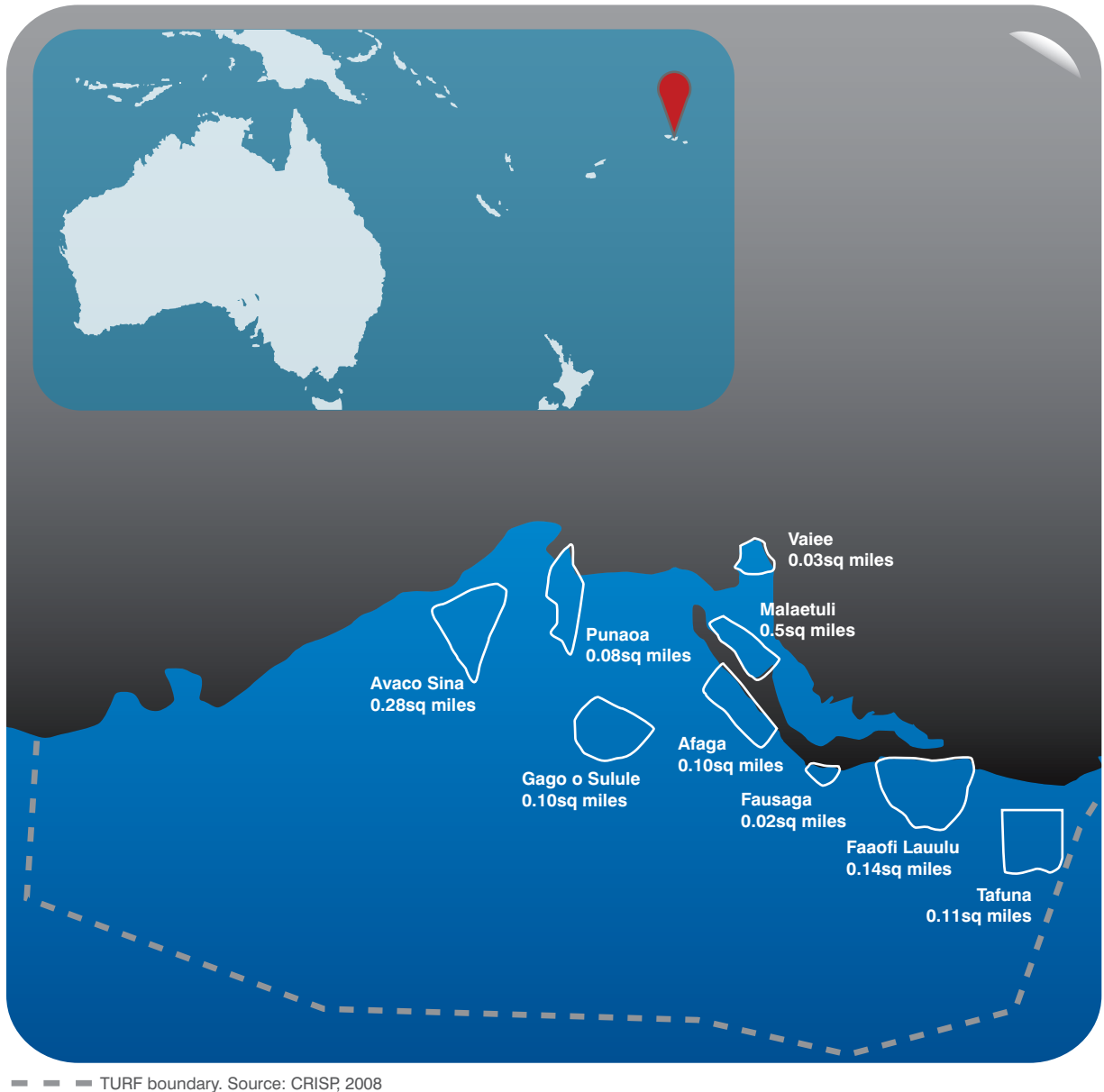
Define and Quantify the Available Resource

The Safata TURF spans 24.6 square miles from Ava o le Fu'a to Le nui, covering all mangrove and reef areas as well as offshore areas within one nautical mile from the reef edge (see Figure 1) (CRISP, 2008). Safata is one of the last remaining mangrove areas in the country and therefore has been a key site in which to develop comprehensive catch share management to protect this habitat. The community manages all species (more than 100) found within TURF boundaries. The most commonly harvested finfish include surgeonfish (Acanthuridae), groupers (Serranidae), mullets (Mugilidae), carangids (Carangidae), rabbitfish (Siganidae) and parrotfish (Scaridae) (Zann, 1991; FAO, 2009). Commonly harvested invertebrates include octopus, giant clams, sea cucumbers and crabs (FAO, 2009).

Catches in Safata are often shared between community members and primarily used for subsistence. There are no catch limits in Safata, but fishing mortality is controlled with a network of no-take reserves in addition to series of input-based restrictions. Safata has instituted a total of 10 village-level no-take reserves within the TURF based on traditional closures known as "sa." Scientific surveys and local knowledge informed placement of the no-take reserves (Ministry of Natural Resources and the Environment, 2005), which generally cover inshore reefs and lagoons where fishing pressure has been highest (Figure 1). The community has placed reserves close to shore to improve visibility and has demarcated boundaries with buoys. Together, the no-take reserves cover 4% of total TURF area (CRISP, 2008). Although this area is small relative to the entire TURF, the coverage of no-take reserves relative to the amount of inshore reefs and lagoon habitat (where fishing pressure is highest) is estimated to be 20%. Removal of any living material in these no-take reserves is banned, other than for approved research purposes (CRISP, 2008).

As outlined in its management plan, the community prohibits the use of destructive fishing gear, dynamite, toxic chemicals, poisonous compounds, coral pounding, fish traps and fish nets with a mesh size smaller than 2.5 inches (CRISP, 2008).

FIGURE 1 | *Safata TURF boundary and no-take reserves*



STEP 3 IN ACTION

Define Eligible Participants

All villages with chiefs holding customary tenure, or matai, over inshore lagoons and reefs are eligible to exercise their customary rights. Through the bylaw process, the Samoan government grants legally enforceable, secure and exclusive privileges to communities.

Members of Samoan villages are closely tied by kinship, and village chiefs typically manage fishing activities in the community (Mollica, 1999). Through the bylaw process, each community can specify who will be eligible

to fish within their community-managed area. In Safata, the combined fishing grounds of the nine individual villages within the district are shared by all of the villages. The District Committee, comprised of village chiefs and leaders, has determined that all residents and individuals living outside of Safata with “monotaga” are eligible to fish within the TURF (CRISP, 2008). Monotaga refers to outsiders who participate in community meetings and contribute either money or food to the community (So’o, 2002).

Given that the program has been based on historical use and traditional heritage, there is no apparent provision for becoming a new participant in the TURF other than being born or married into the Safata community, or cultivating monotaga. To limit entry, outsiders are completely excluded from fishing within the TURF for both subsistence and commercial purposes.

STEP 4 IN ACTION

Define the Privilege

The Fisheries Act of 1988 and Village Fono Act of 1990 provide the opportunity for communities to establish area-based privileges based on their traditional fishing grounds. Certain communities have elected to design and implement programs that include the key attributes of catch share programs. Once established through the bylaw process, the tenure length of the privilege is indefinite, providing long-term, secure access. Fishing grounds typically extend from the shore to the reef edge and are defined by historic territorial boundaries.

Generally, communities have worked closely with the Fisheries Division to develop bylaws and management plans to ensure controls on fishing mortality. Management plans clarify local regulations and outline tasks and responsibilities. Communities are responsible for administering management plans and for monitoring and enforcing local fishing rules.

Since 2000, Safata has developed several management plans for its TURF area, specifying community goals, local fishing regulations, location of no-take reserves, specific bans, monitoring and enforcement strategies and penalty structures. The privilege to harvest within Safata is non-transferable to outside communities, as rights have been determined by customary and historical tenure. However, in Safata, the District Committee has granted access to individuals from the outside possessing monotaga.

STEP 5 IN ACTION

Assign the Privilege

Allocation of the area-based catch share involves registering traditional fishing grounds, and developing bylaws to formalize management authority over fishing grounds. The Land and Titles Court of Samoa determines allocation, as communities with matai are eligible to claim traditional fishing grounds with the court. Allocation is an ongoing process based on when communities choose to establish their claims. Disputes over fishing grounds and boundaries can be resolved through the Land and Titles Court (Techera, 2009).

To obtain full management authority over fishing areas, communities must develop bylaws that regulate the fishing activities of community members and outsiders. Communities can work with the Fisheries Division to determine whether proposed bylaws are in conflict with existing national laws. Once the Samoan government approves the bylaws, communities are able to manage all fishing activity within their traditional fishing grounds.

STEP 6 IN ACTION

Develop Administrative Systems

The movement to revitalize customary management in Samoa is based on a system of co-management between the government and participating communities. The government has provided a supporting role in enabling community-based management efforts, while individual villages have held responsibility for executing management duties on the ground.

The nine villages in Safata are equal partners in managing the TURF. The District Committee is the representative body that oversees TURF administration and management. The District Committee is comprised of high chiefs and members of working committees, which include women, from each village. Church leaders are also integrated into the management process to help with education and promotion of conservation goals. Some functions are handled at the village level, while others are handled at the District level.

All Safata villagers are responsible for surveillance and monitoring of the TURF area to ensure that fishing regulations are followed. A District Officer serves as a liaison between the community and the Samoan Division of Environment and Conservation. Each village is typically responsible for monitoring adjacent no-take reserves, which tend to be sited with sufficient visibility from the shore. If an infraction occurs and the offender is from the same village as the observer, then the observer is to report to the village council. If the offender is from another village, then the observer will report to the District Committee. Penalties for community members include monetary fines, provision of pigs or canned fish, or community service (Tauaefa, 2007). Offenders from outside of Safata must be reported to the District Officer, who handles the infraction in accordance with national law.

The Division of Environment and Conservation conducts annual biological surveys that typically enlist the participation of community members. The primary outcome of the surveys is an assessment of biodiversity and species abundance within the Safata TURF (Ministry of Natural Resources and the Environment, 2005). The surveys are used to inform the development of future management plans.

Initial funding for Safata's TURF was provided by the Samoan government and international aid agencies. However, since 2003, the community has established a trust fund to work towards sustainable financing of community management. The trust fund manages income from fines and tourism activities to support future management efforts (Govan et al., 2009).

STEP 7 IN ACTION

Assess Performance and Innovate

The experiences of Samoa and Safata demonstrate how government can work with communities to revitalize customary forms of management. Villages across Samoa established bylaws and developed management plans to strengthen local management of marine resources. Where communities have established TURFs, the right incentives are in place for sustainable management at the local level.

The catch share program in Safata has met its goals of protecting ecosystem health and strengthening management at the local level. Biological surveys have indicated that the abundance of food fish and other species have increased, while poaching and illegal fishing have been diminished due to improved community monitoring within the TURF (J. Ward, personal communication, 2013). There has been very strong buy-in from the community (Ministry of Natural Resources and the Environment, 2005) and high compliance with regulations.

The catch share program has also provided flexibility to achieve simultaneous goals of increased biological performance and improved livelihood for community members. To provide additional opportunities and diversify risk, leaders adopted the alternative income and food strategy promoted by the Samoan government. The community of Safata incorporated a trochus reseeding strategy into its 2008-2010 management plan, and the government of Samoa helped institute a bivalve restocking program that has greatly improved the abundance of trochus and other clams (Ministry of Agriculture and Fisheries, 2008; J. Ward, personal communication, 2013). Meanwhile the Samoan government has provided low-cost boats to enable community members to access fish for food within the outer reef of the TURF area (Ministry of Agriculture and Fisheries, 2008).

To create a lasting culture of sustainable management, Safata embarked on extensive education efforts to heighten awareness among its community members of fishing rules and the value of conservation. Such education efforts have been integral to increasing buy-in and creating a culture of sustainable resource use into the future.

As a small island nation in the South Pacific, Samoa is highly susceptible to natural disasters. A devastating tsunami struck Samoa in 2009, followed by Cyclone Evan in late 2012. Both natural disasters heavily impacted Safata, and communities there and across Samoa have been focusing their time and resources on recovery efforts. Strong and dedicated leadership within these communities will be integral to continuing sustainable resource management.

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